CLIFFORD

World-Class Auto Security™

concept

20

Owner's Manual

CLIFFORD

World-Class Auto Security™

All Concept Series systems are covered by one or more of the following Clifford Electronics patents: 4,158,874; 4,233,642; 4,327,444; 4,383,242; 4,430,685; 4,845,464; 4,887,064; 4,890,108; 4,922,224; 4,997,053; 5,081,667; 5,146,215; 5,157,375 and other patents

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Standard Features of the Concept 20

- ***Lifetime Warranty*** —For as long as you own the vehicle, Clifford will repair or replace the control unit and remote controls free of charge (see warranty card for full details).

- ***FACT™—False Alarm Control and Test*** — One of many patented Clifford innovations, FACT ***absolutely, positively ends recurring false alarms.***

- ***A Pair of 4-Button/12-Channel Remote Controls*** —Fingertip command from a typical range of 100 feet.

- ***AntiScan™*** — Some car thieves still use *"scanners"* that transmit one digital code after another until they hit the one code that disarms the alarm. AntiScan blocks thieves' scanners to prevent disarming by anyone other than you.

- ***Anti-CodeGrabbing™ (ACG) with Random Code Encryption***— A code-grabber is a new device that lets a thief record and capture off the air from a distance the digital code transmitted by your remote control whenever you arm your car. When you leave, the thief replays the code to disarm the alarm and unlock your car's doors. ACG with Random Code Encryption makes thieves' code-grabbers completely useless, because each time you press the button on your remote control ***a different random code*** is transmitted, yet the system will flawlessly recognize and respond to your transmitter's new code and ignore all others.

- ***Full-Time Remote Panic with Automatic Door Locking and Unlocking***— If you feel threatened, you can, with just a fingertip touch on your remote control, sound the siren, flash the parking lights and unlock your vehicle's power locks for quick entry into your car without fumbling with your keys. If you press the panic button while driving, the siren will sound, the lights will flash and the doors will lock to shield you from the assailant.

- ***UltraSecure Coded Valet Mode™*** — Ensures that no thief can turn off your Concept 20 like they can all other brands of alarms.
  - ***Remote Controlled Valet Mode Entry and Exit*** — With just a press of a button on your remote control from up to 100 feet away, you can enter or exit valet mode. Parking light flashes visually confirm valet mode entry and exit.

Standard Features of the Concept 20 (cont.)

☑ ***Remotely Adjustable Dual-Zone Piezo Sensor™***— With just a touch on the remote, you may, at any time or place, adjust and test the sensitivity of this microprocessor-controlled solid-state sensor. The two sensor zones provide full perimeter protection: If someone bumps into your car, the system will sound a distinctive warning tone; if forced entry is detected, the full alarm will sound.

- ***Audible Confirmation of Sensor Adjustments*** — Issues two chirps for each incremental increase and a single chirp for each incremental decrease in sensitivity.
- ***Unprecedented Reliability*** — There are no moving mechanical parts to wear out and the entire electronic circuitry resides in the passenger compartment, not in the engine well where it would be exposed to temperature extremes, water, vibration and dirt.
- ***Adjust and Test Unobtrusively*** — No repeated arming and disarming, and no siren wailing. You set and test sensitivity without activating the alarm!

☑ ***Dual-Mode "Chirp" Silencing***—Whenever you remotely arm or disarm, the siren *"chirps"* and the parking lights flash to confirm system status. Whenever you wish, you may silence the chirps with either of these two methods:

- ***Remote Controlled Chirp Muting*** —Just a press of remote control button 3 will arm and disarm the system silently. It's perfect when parking at night in a quiet residential area.
- ***Long-Term Chirp Silencing*** —A few flicks of a switch silences the chirps until you choose to reactivate them.

☑ ***Remote Controlled Courtesy Lighting*** —For your personal safety and convenience, when you remotely disarm your Concept 20, the interior lights turn on and stay on until you start the engine or 30 seconds, whichever occurs first.

☑ ***Built-In Parking Light Flasher*** —Visually confirms door lock and system status.

Standard Features of the Concept 20 (cont.)

☑ ***Remote Door Locking/Unlocking with Built-in Relays*** — *No more fumbling with keys in the dark or bad weather!* A press of a button on the remote control simultaneously arms your system and locks your vehicle's power locks. Another press disarms and unlocks.

- ***User-Selectable AutoLock™*** — Automatically locks the doors the instant you turn on the ignition to start the engine.
- ***User-Selectable AutoUnLock™*** — Automatically unlocks the doors when you turn off the engine.
- ***Deluxe Remote Keyless Entry in Valet Mode*** — Use your remote control to lock and unlock the car doors and remotely activate system accessories even while the system is in valet mode.

☑ ***Remote Headlight Activation Capability***— Remotely turn on the headlights to illuminate your way to and from your vehicle (requires an optional relay).

☑ ***Remote Window/Sunroof Closure Capability*** — On certain vehicles (including several models of Mercedes Benz, Jaguar, Volkswagen and BMW), the system's integrated timer and an optional relay can be used to automatically close the power windows and sunroof every time you remotely arm your system.

☑ ***Patented Smart AutoTesting™***—Automatically tests all system triggers and sensors every time you remotely arm and warns you if you accidentally arm your Concept 20 system with the hood or trunk open. If there is a genuine trigger or sensor malfunction, the system will specifically identify the problem, thereby eliminating time-consuming and costly trouble-shooting.

☑ ***Patented Malfunction AutoBypass™ with Automatic Monitoring*** —In the unlikely event of a trigger or sensor malfunction, your Concept 20 will automatically bypass the malfunction and arm all other points to continue relentless protection of your vehicle. If you simply left the hood, trunk or a door open when you armed, just close it and the system will again monitor that trigger point.

Standard Features of the Concept 20 (cont.)

- ***Multiple-Event TotalRecall™***— Concept 20's memory stores the identity of the last eight triggers and/or sensors activated. This provides an invaluable diagnostic means, since, whenever you wish, the system will visually identify the activated triggers and sensors in reverse chronological order.

- ***Patented Smart Prior Intrusion Attempt Alert*** — When you return to your vehicle and remotely disarm your Concept 20, a special chirp and parking light flash sequence will audibly and visually alert you from a distance if an intrusion attempt was foiled while you were away. Your Concept 20 will even identify the specific trigger or sensor that detected the intrusion attempt.

- ***High-Output Insignia Siren*** — A *loud* yet compact siren designed exclusively by Clifford Electronics for far superior performance, features, reliability and even aesthetics to all other manufacturer's look-alike, sound-alike sirens.
  - ***Ultra-Reliability*** — Since sirens are installed in the engine compartment, they're continually exposed to an unforgiving environment of extreme temperatures, vibrations, dirt, dust and water, which may cause the siren's electronics to fail. But the entire electronic circuitry of the Concept 20 siren and all of its components have been designed into the underdash control unit. Consequently, the electronic circuitry is sheltered from the harsh environment and is no longer the weakest link of the alarm system. In fact, the calculated mean time between failure (MTBF) of the Concept 20 Insignia Siren is 10 times better than that of conventional sirens.
  - ***User-Selectable Siren Duration*** — You may set the siren wail for your choice of either 30 or 60 seconds.
  - ***Patented Automatic Noise Abatement*** —Concept 20 siren electronics limit alarm sounding to five siren duration cycles even if a door is left open in the wake of an intrusion attempt. This ensures against battery drain or towing of your vehicle due to noise pollution. The system then automatically resets and re-arms all other points.

Standard Features of the Concept 20 (cont.)

☑ ***Enhanced User-Selectable AutoArming™***— Automatically arms itself *"passively"* if you forget. May qualify you for an insurance discount that could pay for the system (consult your insurance company).

- ***AutoArming Enable/Disable*** — You may disable or re-enable AutoArming with just a few flicks of a switch.
- ***AutoArm & Lock™*** — You may set the system to automatically lock the doors every time the system AutoArms.
- ***Visual Indication*** — Two parking lights flashes signal that the 30-second countdown to AutoArming has started.
- ***Instant AutoArm Bypass*** — Just a quick turn of the ignition switch will bypass AutoArming for one cycle — perfect when fueling the vehicle. The AutoArming feature is automatically restored the next time you park your vehicle.

☑ ***Patented Remote Control Code Learning*** — Just a few flicks of a switch lets you match to the system up to 4 different 12-channel Clifford remote controls. Just as easily, a lost or stolen remote control can be deleted from the system memory.

☑ ***Multiple-Car Control***— Lets you use the same remote to control up to seven different vehicles.

☑ ***Selectable Starter/Ignition Interrupt***— You may choose either a fault-proof mode, which lets you start the engine even in the unlikely event of a system malfunction, or ultra-secure mode that ensures a thief won't be able to start the vehicle even if he finds the system control unit and disconnects it!

☑ ***Advanced CMOS Microcomputer*** —Very large scale integration (VLSI) microprocessor commands and monitors all system functions more than 1,000,000 times per second, yet it draws less power than the vehicle's clock, so it won't deplete your car battery like other alarms.

☑ ***Control Unit with 4 Channels***— For remote controlled system operation and accessories.

Standard Features of the Concept 20 (cont.)

- ***High-Luminescence LED Status Indicator with Automatic Battery-Saving Mode*** — Adds visual deterrence and identifies system status. To conserve vehicle battery power, if the system has remained continuously armed for 48 hours, the flash rate will automatically slow to half the normal rate. If left continuously armed for 96 hours, the blink rate will slow to one-quarter the normal rate.

- ***Patented SmartPowerUp™ II*** — When power to the system is disconnected, the system's non-volatile memory always remembers the last state (armed, disarmed or valet mode) and returns to that state when power is restored. So if a thief disconnects the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren while immobilizing the vehicle.

- ***Full-Time Programming Access***— You can easily change the status of more than a dozen different user-selectable features at any time, even while driving. Clear, audible signals confirm each feature selection and setting.

Welcome to the world of high-technology vehicle security and convenience

Congratulations on the purchase of your Concept 20 vehicle security/convenience system. Clifford Electronics has long been recognized as the world's leading manufacturer of high-technology vehicle security systems and accessories. In fact, Clifford Electronics holds more patents than all other vehicle security manufacturers combined. Buying Clifford has always meant buying the best, and nowhere is our commitment to technological innovation, reliability and quality more evident than in the astounding Concept 20.

Your Concept 20 is loaded with protective features and lifestyle conveniences that other car alarm companies don't even have on their wish lists. Features like Anti-CodeGrabbing that fights off the latest threat from high-tech thieves. A thief equipped with a code-grabber can record with total impunity the codes of your car alarm's remote control from up to several hundred feet away. How? The thief simply waits for you to arm or disarm your alarm with your remote control. The thief's portable, pocket-sized code-grabber will automatically pick and record the transmitted code off the air. As soon as you walk away, he simply plays it back, instantly disarming your alarm and unlocking the doors. It's like giving the thief your car keys. Code-grabbing will instantly defeat all other brands of remote controlled car alarms, regardless of whether they are equipped with anti-scanning or trillions of digital codes.

Clifford's unique PlainView Coded Valet Switch ensures that no thief can turn off your Concept 20 like the can with all other car alarm brands. For total freedom from incorrectly adjusted sensors, there's remote controlled adjustment of the system's dual-zone piezo sensor that allows you to set the desired sensitivity level any place or time with just a touch of a button on your remote control. Plus there's remote controlled valet mode, remote controlled timed headlight activation capability, an electronic interlock to prevent accidental activation of the optional remote trunk release, smart automatic locking/unlocking if you ever "panic" the system, full-time programming access (even while driving), and much, much more.

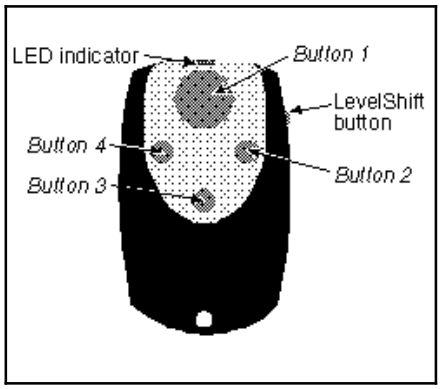
Yet despite all the sophistication, the Concept 20 is amazingly easy to use: never more difficult than a few flicks of a switch or a press of a button on one of your miniature keychain remote controls.

Your 4-button/12-channel remote controls

The 4-button/12-channel remote controls are ultra-sophisticated miniature radio transmitters powered by a tiny 12-volt battery. Range is up to 100 feet. A weak remote control battery will reduce range. Electrical interference and even sunspots can interrupt the signal from your remote control to the system. If this happens, repeatedly press the remote control button (this works better than holding the button down). The 4-button/12-channel remote control is the key to your system. It incorporates Clifford's Anti-CodeGrabbing™ (ACG) technology for the ultimate protection against "code-grabbing" devices (see page 13). You will use your remote control to arm and disarm the system, lock and unlock the doors, activate the panic feature, adjust sensor sensitivity, enable/exit valet mode, command options such as a remote trunk release, timed headlight activation, power window operation, electric garage door interface and even remote starting of the engine and heater or air conditioner, among other options.

How to use your keychain remote control

Your remote control can individually command up to 12 different system functions and options. It's like having a TV with 12 channels. You change channels (functions) with your keychain remote control. But instead of putting 12 buttons on the remote, we made it easy: First, the button you use the most — button 1 to arm, disarm, lock and unlock — is larger than the others. Buttons 2, 3 and 4 are the smaller buttons to the right, below and left of button 1. The LevelShift button on the side of the remote control allows you to select channels 5–12:



- ***To transmit either channel 1, 2, 3 or 4:*** Just press either button 1, 2, 3 or 4. For instance, to transmit channel 3, press button 3. While you transmit, the LED indicator will blink once every second: this indicates level 1.
- ***To transmit either channel 5, 6, 7 or 8:*** Press the LevelShift button once. This shifts buttons 1–4 to level 2 (channels 5–8). Then press the desired button within the next 7 seconds. For instance, to transmit channel 5, press the LevelShift button once, then press button 1. While you transmit, you'll notice that the LED indicator blinks twice, pauses, blinks twice, etc.: this indicates level 2.
- ***To transmit channel 9, 10, 11 or 12:*** Press the LevelShift button twice. This shifts buttons 1–4 to level 3 (channels 9–12). Then press the corresponding button within the next 7 seconds. For instance, to transmit channel 12, press the LevelShift button twice, then press button 4. While you transmit, you'll notice that the LED blinks three times, pauses, blinks three times, etc.: this indicates level 3.

NOTE: One second after you stop transmitting level 2 or level 3 (channels 5–12), the remote control automatically returns to level 1 (channels 1–4).

What each button/channel does

Your Concept 20 remote controls come pre-programmed so that certain channels command certain functions. If you wish, you can actually assign any channel except 9 through 12 to any function (see pages 20-24). The following chart indicates what each remote control channel number does, and how to transmit each channel number.

Factory settings of the 12 remote control channels				
Transmitting channel number:	**Causes the system to:**	**Press the LevelShift button?**	**How many times?**	**Press button number**
1	arm or disarm and lock or unlock the doors	no	—	1
2	optionally turn on the headlights (if the system is armed) AND optionally pop the trunk (if the system is disarmed)	no	—	2
3	silently arm or disarm	no	—	3
4	activate optional accessory function #1	no	—	4
5	activate optional accessory function #2	yes	once	1
6	activate optional accessory function #3	yes	once	2
7	activate optional accessory function #4	yes	once	3
8	activate optional accessory function #5	yes	once	4
9	remotely enter or exit valet mode (see page 15)	yes	twice	1
10	activate optional accessory function #6	yes	twice	2
11	remotely adjust sensitivity of the Piezo Sensor's primary zone (see page 17)	yes	twice	3
12	remotely adjust sensitivity of the Piezo Sensor's warning zone (see page 17)	yes	twice	4

TO ARM THE SYSTEM . . . . . . Press button 1 (channel 1) once. You will hear two chirps and the parking lights will flash twice. The dashboard LED will flash repeatedly and your vehicle's door locks will automatically lock.

TO DISARM THE SYSTEM . . . . . . Press button 1 (channel 1) again. One chirp and one parking light flash confirms disarming. In addition, the doors will automatically unlock and the interior lights will turn on and stay on for 30 seconds or until you start the engine, whichever occurs first.

TO SILENTLY ARM OR DISARM THE SYSTEM . . . . . . Press button 3 (channel 3). Your Concept 20 system will arm or disarm with all the indications noted above except for the chirp acknowledgments.

TO ACTIVATE THE PANIC FEATURE	Press button 1 (channel 1) for 3 seconds. The parking lights will flash repeatedly and the siren will blare for 30 or 60 seconds (user-selectable), or until you press button 1 again to turn it off. If the ignition is on (indicating you are in the car), the doors will automatically lock to prevent an assailant from entering. If the ignition is off, the doors will unlock, allowing you to enter immediately without fumbling with your keys.
TO REMOTELY TURN ON THE HEADLIGHTS.	Button 2 (channel 2) controls an electronic interlock that lets you separately command two functions with the same channel: one when the system is armed and another when disarmed. Pressing button 2 while the alarm is armed will optionally turn on the headlights for any duration you wish between one second and two minutes (the factory setting is 30 seconds; see User-selectable features on pages 20-24).
TO REMOTELY OPEN THE TRUNK . . .	Button 2 (channel 2) can control another function when the system is disarmed, such as an optional remote trunk release. Pressing button 2 while the alarm is disarmed will remotely open the trunk.
TO ACTIVATE OTHER OPTIONS REGARDLESS OF ALARM STATE.	Button 4 (channel 4) and channels 5–8 and 10 (see How to use your keychain remote control on page 10) can activate accessories such as the IntelliStart remote engine starter, remote power window control, electric garage door and entry gate opener(s), Concept 20 systems on your other vehicles, etc.
What about channels 9, 11 and 12?.	Channels 9, 11 and 12 control remote valet mode entry/exit (see page 15) and remote adjustment of each of the two Piezo Sensor zones (see page 17).

How to interpret the chirps and parking light flashes

When you use the remote control, the system responds with chirps (unless the chirp muting feature is turned on) and parking light flashes:

Chirps and flashes	Meaning
1	Your system is disarmed or you have remotely exited valet mode (see page 15)
2	Your system is armed or you have remotely engaged valet mode (see page 15)
2 and then 4	Armed but there is a door open (if there was a 5-sec. delay) or the sensor is malfunctioning (if there was a 10-sec. delay) (see Smart AutoTesting on page 17)
3	Disarmed but there was an intrusion attempt while you were away (see Smart prior intrusion attempt on page 18)
4	Armed but the hood or trunk is ajar (see Smart AutoTesting on page 17)

Anti-CodeGrabbing™ (ACG) with Random Code Encryption

A Clifford exclusive that protects you and your automobile from the most effective and onerous car stealing device ever used by car thieves — a code-grabber. Code-grabbers are far more effective and efficient than scanning. Unlike scanners that sequentially transmit one digital code after another until they hit the correct code to disarm the alarm (a process that may take minutes to years depending on the system's total number of codes), code-grabbers literally record, from hundreds of feet away, the code sent by your car alarm remote control. Then the thief simply plays back the code when you're gone, instantly disarming the alarm and unlocking the doors. It's like giving the thief your car keys. Non-Clifford alarms can be defeated that easily. In contrast, Concept Series systems use complex digital signal processing and unbreachable encryption to randomly change the digital code every time you use the remote control. Your remote will never transmit the same code twice, and the control unit will never accept the same code twice. Thus the code recorded and played back by the thief's code-grabber will never be accepted by your Concept 20. Only ACG can make a car alarm impervious to code-grabbing, and only Clifford systems have ACG with Random Code Encryption.

Enhanced AutoArming™

If this feature is enabled and you forget to remotely arm, the system will automatically arm itself 30 seconds after the vehicle doors are closed. For your convenience, if you re-open any door(s) within the 30-second countdown, AutoArming will restart from the beginning once all doors are closed. Concept 20 has these additional AutoArming features:

- ***AutoArming enable/disable:*** If you prefer, you may deactivate or reactivate the AutoArming feature. See User-selectable features on pages 20-24.
- ***Visual acknowledgment:*** Five seconds after you exit the vehicle and close all the doors, the parking lights will flash twice to confirm that the AutoArming countdown is progressing. Then, 25 seconds later, the system will AutoArm.
- ***AutoArm & Lock:*** To ensure you can't accidentally lock your keys inside the car, the system is factory-set not to lock the doors upon AutoArming. To change this setting, see User-selectable features on pages 20-24.
- ***Instant AutoArming bypass:*** Prevents AutoArming when fueling the vehicle and other times when you wish to temporarily bypass the AutoArming feature. To activate Instant AutoArming Bypass, rapidly turn the ignition switch to "ON" then "OFF." You will hear a single siren chirp to confirm that the system will not AutoArm. Your Concept 20 will revert to its normal operating mode when you next start the engine.

Smart trunk release option

If the remote trunk release feature was installed, you may use remote control button 2 to remotely pop the trunk. Your system has a built-in electronic interlock to prevent unintentional activation of the remote trunk release when you drive, or when the system is armed.

UltraSecure™ Coded Valet Mode

Your secret valet code

In seconds, thieves can disable all other alarm brands by hotwiring the ignition and flicking an easy to find "hidden" valet switch. Your system has safeguards that absolutely ensure a thief cannot enable the valet mode as a way of "turning off" your system. How? To enable valet mode, the driver must first enter a secret valet code on the PlainView switch. If a thief tries guessing your code, after three incorrect entries, the siren will sound and the system will not accept any further entries for two minutes. Your code will be a 1-to-3-digit number of your choosing. Each digit can be any number from 1 to 9, (i.e. the code can be any number between 1 and 999, except those that contain a zero). Whenever the system is in valet mode, it overrides the AutoArming feature (see page 13) and all the security features are turned off. At various times, you will need to switch the system off. For instance, when having your car serviced, washed or parked by a valet.

Your factory-set valet code is the single digit "2."

NOTE: If you temporarily lose the use of your remote controls, you can disarm the system by enabling valet mode.

Definitions

- ***Digit:*** A digit is defined as any number from 1 to 9, inclusive.
- ***Valet code:*** A valet code may be 1 to 3 digits:
  A one-digit code=X=any number between 1-9
  A two-digit code=XY=any number between 11-99 (excluding those with zeros)
  A three-digit code=XYZ=any number between 111-999 (excluding those with zeros)

Remember, no code can have a zero.

- ***PlainView switch:*** A rocker switch mounted on the dashboard or console. The switch has three positions: 1.) Latched 2.) Center 3.) Spring-loaded momentary. When you press the latched side, the switch remains in its pressed position. When you press the momentary side, the switch bounces back to the center position.
- ***Entering a digit:*** To enter a digit, you tap (press and release) on the momentary side of the PlainView switch the number of times corresponding to the numeral of the digit to be entered, followed by pressing to the latched side, then returning the switch to its center position.
- ***Entering a code:*** If your code has only one digit, enter the code as described in "Entering a digit." If your code has more than one digit, just repeat the above for each digit of your code.

To enable valet mode

1. Turn the ignition switch to its "ON" position or start the engine.
2. Enter your secret valet code on the PlainView switch, then return the switch to its center position.
3. You now have 5 seconds to press the latched position to enter valet mode. The system's LED will glow continually for on-going visual confirmation of valet mode.

To exit valet mode

1. Turn the ignition switch to its “ON” position or start the engine.
2. Flick the switch back to its center position. The LED will turn off to confirm that the system is now in its normal operating mode.

Setting your own secret valet code

Since all Concept Series systems have the same factory-set code, it is highly advisable that you set your own valet code. You may choose any 1-, 2-, or 3-digit code that does not have any zeros. You can also change your valet code whenever you want. Simply write down the 1-to-3 digit code you wish to use (remember, no zeros in the code), then refer to the User-selectable features section on pages 20-24.

Example

Let’s say you want to set your valet code to 31. To do so, you would do the following:

1. From the Table of user-selectable features on pages 23 and 24, you would note that the “set a new secret valet code” feature is in column 3, row 5.
2. Enter program mode by turning on the ignition, entering your current valet code, then pressing the PlainView switch to its momentary side for 3 seconds until you hear a chirp.
3. Select column 3 by moving the switch between latched and center 3 times, i.e.: latched, center, latched, center, latched, center. After a brief pause, you will hear 3 chirps to confirm that you have selected feature column 3.
4. Select row 5 by pressing and releasing the momentary side of the switch 5 times. To help you count, you will hear a chirp each time you press the momentary side.
5. Immediately flip the switch to the latched position.
6. Enter you new code. To enter 31 as your new code, you would press the switch in this manner: momentary, momentary, momentary, latched (you’ll hear 3 chirps to confirm the first digit), momentary, latched (1 chirp to confirm the second digit), center.
7. Wait 3 seconds until you hear 2 chirps, indicating the new code has been accepted.
8. Turn off the ignition to exit program mode (you’ll hear a 3-chirp confirmation).
9. VERY IMPORTANT: You must immediately test your new secret valet code: Turn on the ignition, enter your new code, then flip the switch to its latched position. The LED will illuminate. If it does not, the new code you programmed and the one you just entered do not match. In such a case, the system will revert to the previous code.

Remote controlled valet mode entry and exit

You can even enable or exit valet mode with your remote control simply by transmitting channel 9 (LevelShift twice, then button 1). In addition to the above indications, two parking light flashes will confirm that you have remotely enabled valet mode, while a single flash confirms exiting of valet mode.

Keyless entry in valet mode

Even if valet mode is enabled, you can still remotely control the convenience features. For instance, simply press button 1 (channel 1) as if you were disarming and the doors will unlock (indicated by one parking light flash) and the interior lights will turn on.

Press button 1 again and the doors lock (confirmed by two flashes). You can also use the other channels to activate options such as a remote trunk release or remote engine starting.

FACT™— False Alarm Control and Test

With FACT, you'll never experience repeated false alarms. If the Insignia Siren goes off, DO NOT remotely disarm the system; allow it to run for the full siren duration. Before sounding the siren a second time, the system automatically checks for another activated trigger to verify that an intrusion is in progress. Should the siren sound again, you will know for sure that someone is tampering with your vehicle. (To disable FACT, see User-selectable features on pages 20-24.)

Selectable starter/ignition interrupt

At the time of installation, you can select whether your Concept 20 interrupts the starter line or the ignition line. To verify which line is electronically interrupted, enter the vehicle, close the doors, arm the system while inside the vehicle, then try to start the engine. If the engine cranks but does not start, the ignition is bypassed. If it does not crank at all, the starter is disabled.

In addition, the starter/ignition interrupt will be set in either Fault-Proof mode, which lets you start the engine even in the unlikely event of a complete system failure, or Super-Security mode that ensures a thief won't be able to start the engine even if he cuts all the wires or finds the system control unit and disconnects it.

Changing the mode requires a minor relay wiring change and installer-only programming. Your local Authorized Clifford Dealer can make the changes for you.

How to interpret the LED status indicator

The LED on your car's dashboard or console will inform you of the system status:

LED Condition	Meaning
Off	System is disarmed and in normal operating mode (i.e., valet mode is off)
On	Valet mode is on, the vehicle can be driven or serviced without having to disarm
Flashing	System is armed and protecting your vehicle
Pause between flashes	Either a malfunction (see page 17) or an intrusion was attempted (see page 18)

Automatic Battery-Saving Mode

To conserve vehicle battery power (the LED draws more current than the entire control unit), if the system has remained continuously armed for 48 hours, the flash rate will automatically slow to half the normal rate. After 96 hours, it slows to one-quarter.

AutoLock and AutoUnLock™

For your safety and that of your passengers, the doors automatically lock the instant you turn on the ignition (see User-selectable features on pages 20-24). When you turn the ignition off, AutoUnLock automatically unlocks the doors. To suit your preferences, you may turn off either or both the AutoLock and/or AutoUnLock features. There are four possibilities: AutoLock "on" while AutoUnLock is "off", or vice-versa. The other two combinations are both AutoLock and AutoUnLock "on" or both "off."

Remote controlled sensor adjustments

Due to ever-changing conditions, all alarms require periodic fine-tuning of their sensors. An improperly adjusted sensor is the most common cause of false alarms. With other alarms, this requires repeated trips back to the dealer. Not so with Concept 20. You can adjust sensitivity electronically without tools and without even knowing where the sensor is mounted! If the setting(s) of the Piezo Sensor is either too sensitive or not sensitive enough, you may individually test and adjust the settings of each zone. To adjust the Piezo Sensor, just use the following procedure:

1. Disarm the system, then select the sensor zone you wish to adjust:
   a. Primary zone: Transmit channel 11 (LevelShift twice, then button 3).
   b. Warning zone: Transmit channel 12 (LevelShift twice, then button 4).
2. To test the current sensitivity setting:
   a. Primary zone: Firmly "thump" the window pillar with the side of your fist. You will hear a chirp to confirm activation of the primary zone.
   b. Warning zone: "Thump" the window pillar with somewhat less force. A chirp will confirm activation of the warning zone.
3. If you are not satisfied with the detection level and wish to increase sensitivity, press button 2 on your remote control. To decrease it, press button 4. Each time you increase sensitivity, the siren will chirp in higher and higher pitched tones to confirm the higher sensitivity setting. Conversely, lower and lower tones confirm each sensitivity decrease. Two normal tone chirps indicate minimum and maximum settings. There are 16 sensitivity levels for each of the two sensing zones.
4. Repeat steps 2 and 3 until you are satisfied with the sensitivity, then press button 1 to record the new sensitivity setting and exit the sensor test/adjust mode (you'll hear three chirps to confirm exit). You may now either repeat steps 1–4 for the other sensor zone, or press button 1 again to arm the system.

Sound complicated? It really isn't, there's just a lot of explanation of what's happening with each step. All you really have to do is the actions noted in bold type. Give it a try.

Smart AutoTesting™

Each time you remotely arm the system, it tests all triggers and sensors. If the hood or trunk is open when you remotely arm, the system will immediately alert you of the problem by sounding 4 chirps and 4 parking light flashes instead of the usual 2 and 2. If a door is ajar, you will receive the usual 2 chirps and flashes, then, 5 seconds later, there will be 4 chirps and 4 flashes. (This door ajar warning will not work on vehicles that

continued . . .

have factory-delayed courtesy lights). If a sensor is malfunctioning, you will receive the usual 2 chirps and 2 flashes, then, 10 seconds later, there will be 4 chirps and 4 flashes.

NOTE: Since this is a warning indication, you will hear the 4 chirps even if you have the chirp muting feature turned on.

- ***Specific malfunction identification:*** The system can also indicate the specific trigger or sensor that is malfunctioning. If you get the 4-chirp/4-flash signal upon arming, perform the following to identify the malfunctioning trigger or sensor:

1. Remotely disarm, then turn on the ignition. The LED status indicator inside your vehicle will blink 1-3 times, pause, then repeat.
2. Count the number of blinks in one cycle between pauses (for your convenience, the blink cycle repeats a total of 5 times) and refer to the chart below:

Number of LED blinks between pauses	Trigger/sensor indication
1 blink	Piezo Sensor
2 blinks*	Door trigger*
3 blinks	Hood or trunk trigger

** If your vehicle has a factory-installed feature that turns off or dims the interior courtesy lights several seconds after you exit the vehicle, the system cannot provide this indication.*

Automatic malfunction bypass

To provide the utmost protection even if a system component malfunctions, your Concept 20 system will automatically bypass any faulty point and arm all other triggers and sensors to provide the utmost possible protection until you can have the system serviced by your local Authorized Clifford Dealer. If you accidentally armed the system with the hood, trunk or a door open, just close the open point and the system will again monitor that point.

Multiple-event TotalRecall™

The system memory records the identity of the last 8 activated or malfunctioning triggers and sensors, which allows your installer to instantly track down a malfunction. To identify the triggers and sensors held in memory, use the following procedure:

1. With the ignition OFF, flick the PlainView valet switch to its latched side.
2. Press button 1 to “arm” the system, then again to “disarm.”
3. The LED will blink 1–3 times to indicate the most recently activated point, pause, blink 1-3 times to indicated the next most recently activated point, and so on.
4. Write down the number of blinks between pauses and refer to the chart above.
5. Return the PlainView switch to its normal center position.

Smart prior intrusion attempt alert

If you hear three chirps when you remotely disarm, it means that a trigger or sensor was activated in your absence. When you enter the vehicle and turn on the ignition (or start the engine), the LED will blink 1–3 times, pause, then repeat the blink cycle 4 more times. Count the number of blinks in any one cycle and refer to the chart above.

High-output Insignia™ Siren

All the siren electronics are in the system control unit rather than the siren itself. This protects them from heat, dirt and exposure to the elements (other alarm companies' sirens are far more susceptible to failure). Your Concept 20 also provides these additional features:

- ***Long-term chirp silencing:*** Whenever you wish, you may silence your Concept 20's arm and disarm chirps until you decide to restore them. The parking light flashes will continue to provide visual confirmation of remote controlled arming and disarming. See User-selectable features on pages 20-24.
- ***Remote controlled chirp muting:*** Remote controlled chirp muting capabilities are especially valuable when parking late at night in a quiet residential area or any other time when you want to arm or disarm silently. To arm or disarm silently, simply press button 3 (channel 3) on your remote control instead of the usual button 1 (channel 1).
- ***Siren duration:*** When the system detects an intrusion attempt, the alarm is set to sound for 30 seconds. However, if you prefer, you may change it to 60 seconds. See the User-selectable features section on pages 20-24.

SmartPowerUp™ II

If power to the system is ever removed, SmartPowerUp II ensures the system will automatically restore itself to its previous state when power is restored. So if a thief disconnects the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren while immobilizing the vehicle. If your vehicle is to be serviced by a mechanic, just put the system in valet mode via the remote control (see Remote controlled valet mode entry and exit on page 15). If the mechanic needs to interrupt power, your system will automatically return to its valet mode state when power is restored; there will be no alarm activation and no need to provide your mechanic with your remote control and instructions on how to use it.

User-selectable features

Your Concept 20 allows you to set many of its features to your own personal preferences. Although the system's programming capabilities are very extensive, we have made the programming procedures very simple: to make a change, you just flick the PlainView switch a few times. Once you've changed a few settings, you'll find that programming Concept 20 is so easy that you can even do it while driving! The system comes with all of its features pre-programmed as noted by the bold type in the Table of user-selectable features on pages 23-24. To change any of the settings, use the steps noted below. To restore the feature to its factory setting, just repeat the procedure:

How to change a user-selectable feature:

Briefly, here's how it will work:

- You will pick a feature from the Table on pages 23-24, noting the feature's column and row numbers.
- First you'll need to get into program mode by entering your valet code (see page 14). After you have entered your code, press the momentary side of the PlainView switch until you hear a chirp. You're now in the "Feature Select" position.
- Next you'll press the latched side of the switch a number of times identical to the column number. Lastly, you will press the momentary side of the switch a number of times corresponding to the row number.

That's all there is to it! After you enter the feature's column and row numbers, you'll hear either one chirp to indicate that the feature has been turned off, or two chirps if turned on. It's easy once you've done it. Try the examples on page 21 to get the hang of it.

Step-by-step programming instructions

1. Refer to the Table of user-selectable features and make note of the column (across) number and the row (down) number of the feature(s) you wish to program.
2. Turn on the ignition, or start the engine (skip this step if the engine is running).
3. Enter your valet code (see page 14), then press the PlainView switch to its momentary side for about 3 seconds until you hear a siren chirp (the system LED will also turn on to indicate program mode.) You are now in the "Feature Select" position.
4. Select the feature column: Toggle the switch in and out of the latched position the same number of times as the column number of the selected feature (NOTE: each latched-to-center motion is counted as one). Pause. You will hear the same number of chirps as the column number you have selected, audibly confirming your selection.
5. Select the feature row: Press and release the momentary side the same number of times as the feature's row number. You'll will hear a chirp each time you press.
6. If there is a NOTE for the selected feature, perform the actions noted.
7. Pause. You will hear either one or two chirps: Two chirps = ON, one chirp = OFF.
8. You may select another feature, or you may exit program mode:
   a. To select another feature in that column, repeat step 5 within the next 10 seconds (after 10 seconds, 3 chirps mean you are now back in the "Feature Select" position).
   b. To select a different feature column, go to step 4.

c. To exit program mode, turn the ignition off (you'll hear 3 chirps and the LED will turn off to indicate exit of program mode). If driving, just wait 60 seconds and the system will automatically exit program mode.

EXAMPLE 1: Turn on AutoArm & Lock:

You can set the system to automatically lock the car doors when the system AutoArms (see page 21). To turn on the AutoArm & Lock feature, you'll note that "AutoArm & Lock" is in column 3, row 2 of the Table (on pages 23-24). The "off" in bold type indicates the factory setting. The following example will turn on AutoArm & Lock.

1. To enter program mode, turn on the ignition, enter your valet code (as noted on page 14), then hold the switch in its momentary position until you hear a chirp.
2. Select column 3 by pressing latched and then back to center, then latched, center, latched, center (then wait for the one chirp to confirm column 3). To select row 2, press momentary twice (you'll hear a chirp each time you press the momentary side).
3. After a brief pause, you'll hear two chirps to confirm that the AutoArm & Lock feature is now on.
4. Turn the ignition off. You'll hear 3 chirps, confirming automatic exit from the program mode, and you're done!

If you make an error, just turn off the ignition and start again. To turn AutoArm & Lock back off, just repeat steps 1–4. In step 3, you'll hear one chirp to confirm that the feature has been turned back off. Remember, one chirp = off, two chirps = on.

NOTE: You have 10 seconds to enter the row number after selecting the column number. If you wait too long, the system jumps back to the "Feature Select" position (this is indicated with 3 chirps). If you wait another 60 seconds, the system will exit program mode.

In Example 2 below, you'll learn how easy it is to change the settings of several different features in just one session, without having to repeatedly turn the ignition on and off:

EXAMPLE 2: Turn off AutoLock and AutoUnLock, then change siren duration to 60 sec.:

This time, we will change the settings of three different features in just one programming session: We will turn off both the AutoLock and AutoUnLock features (see page 17), as well as change the siren duration to 60 seconds (see page 19). Here's all you have to do:

1. Enter program mode as previously noted (ignition on, enter your valet code, press the momentary side until you here a chirp).
2. Since AutoLock is in column 2, row 1 of the Table, you will have to enter the latched side twice and the momentary side once. Therefore, move the switch to latched, center, latched, center. Wait for the two chirps to confirm the selection of column 2. Within 10 seconds, press and release the momentary side of the switch once (you will hear a chirp when you press it). After a brief pause, you'll hear 1 chirp to confirm that AutoLock is now off.
3. Since AutoUnLock is in column 2, row 2 and is in the same column as you just entered for AutoLock, there is no need in this case to again select column 2.

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Therefore, you can go right away to the row selection (momentary side of the switch). Now, within 10 seconds, press the momentary side two times to jump to row 2. After a brief pause, you'll hear 1 chirp to confirm that AutoUnLock is now off.

4. Now look up the location on the table of siren duration. Note that it's in column 3, row 4 (latched, center, latched, center, latched, center, wait for the 3-chirp/column 3 confirmation, then 4 momentary presses). After a brief pause, you'll hear two chirps to confirm that the siren duration is now set to 60 seconds.
5. To exit the program mode, turn the ignition off. You'll hear 3 chirps to confirm program mode exit.

You just made three programming changes in only five steps. Easy, isn't it? Notice again that in step 3 on the previous page you did not have to re-select column 2. If you don't touch the switch, the system stays in the column for 10 seconds to allow you to select any other feature(s) in the same column without having to re-enter the column number. Of course, you can select a new column at any time.

If you wait more than 10 seconds, the system automatically jumps back to the "Feature Select" position. This is the "stand-by" position: ready for entry of a new programming selection. If no action is taken for the next 60 seconds, the system automatically exits program mode, perfect if you program while driving or if you forget to turn off the ignition.

Adding new remote controls

For other drivers in your family, or if you wish to control Concept systems on your other cars with the same remote control, you can buy additional remote controls from any Clifford Dealer and program them into the system yourself. Each Concept 20 will respond to as many as four 12-channel remote controls. To add a new remote control to the system, use the procedures noted in the User-selectable features section on pages 20-24.

How to erase the codes of lost or stolen remote controls

If one of your remote controls is ever lost or stolen, you can erase its digital codes from the system memory to make sure that the missing remote control can never be used to disarm your system. To do so, use the "Erase all channels" feature (feature column 1, row 5 on the Table of user-selectable features on pages 23-24). This will clear all remote control codes from the system memory. Then simply program each remaining and/or replacement remote control as noted in the Adding new remote controls section above.

Table of user-selectable features: 1 chirp = OFF, two chirps = ON.

Feature Select	*Column 1* *1st latched*	*Column 2* *2nd latched*	*Column 3* *3rd latched*
Row 1 *1st momentary*	Add new remote to channel 1 *info on page 11* ***NOTE 1***	AutoLock **on**/off *info on page 16*	Enhanced AutoArming: **on**/off *info on page 13*
Row 2 *2nd momentary*	Add new remote to channel 2 *info on page 11* ***NOTE 2***	AutoUnLock **on**/off *info on page 16*	AutoArm & Lock: on/**off** *info on page 13*
Row 3 *3rd momentary*	Add new remote to channel 3 *info on page 11* ***NOTE 3***	FACT: **on**/off *info on page 16*	✶ Set headlight duration: 1sec - 2.5min (**30sec**) *info on page 12* ***NOTE 6***
Row 4 *4th momentary*	Add new remote to channel 4 *info on page 11* ***NOTE 4***	AutoActivate timed accessory upon remote arming: on/**off** ***THIS FEATURE IS FOR INSTALLERS ONLY***	Siren duration: 60/**30** seconds (1/**2** chirps) *info on page 19*
Row 5 *5th momentary*	Erase all channels *info on page 22* ***NOTE 5***	Long-term chirp silencing: on/**off** *info on page 19*	Set a new secret valet code *info on page 15* ***NOTE 7***

✶ ***WARNING:*** ***If you have remote window and sunroof closure, DO NOT CHANGE THIS SETTING: it requires installer-only adjustment. Changing the duration may cause damage. Please Note: There is a column 4 that contains installer-only features; do not change any of these settings. If you accidentally select column 4, turn off the ignition.***

- ***NOTE 1:*** Transmit channel 1 (or other channel of your choosing) of the new remote control. You will hear one chirp to confirm programming of channel 1.
- ***NOTE 2:*** Transmit channel 2 (or other channel of your choosing) of the new remote control. You will hear two chirps to confirm programming of channel 2.
- ***NOTE 3:*** Transmit channel 3 (or other channel of your choosing) of the new remote control. You will hear three chirps to confirm programming of channel 3.
- ***NOTE 4:*** Transmit channel 4 (or other channel of your choosing) of the new remote control. You will hear four chirps to confirm programming of channel 4.
- ***NOTE 5:*** When you hear one chirp, all remotes will have been erased from the system memory. You must now add the new and/or existing remote controls to the system (i.e., program channels 1–4 of each remote that will be used with your Concept 20).
- ***NOTE 6:*** The headlight timer starts as soon as you select this feature. When the duration you wish has been reached, press button 1 on the remote control. You will hear two chirps to confirm the new headlight timer duration.

- ***NOTE 7:*** ***Immediately flip the switch to its latched position***, then:
  a. Enter the new code that you wish to use. The system will sound the same number of chirps as the digit you choose when you move the switch to the latched side (e.g., if the first digit is 4, you'll hear four chirps when you press the latched side).
  b. Make sure to return the switch to its center position when complete.
  c. ***Wait 3 seconds until you hear 2 chirps***, indicating the new code has been accepted.
  d. Turn the ignition off. You'll hear 3 chirps to confirm program mode exit and the LED will turn off.
  e. **VERY IMPORTANT: You must immediately test your new secret disarming/valet code**: Turn the ignition on, enter your new code, then flip the switch to its latched position. The LED will illuminate. If it does not, the new code you programmed and the one you just entered do not match. ***The system has reverted to the previous code.***

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